

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-34 (cancelled).

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Claim 35 (previous presented): A method of flowing blood from a heart chamber to a coronary vessel, the method comprising:

providing a conduit with a first end and a second end;

providing a natural valve;

placing the conduit within a heart wall such that the first end of the conduit is open towards the heart chamber and the second end is open towards the blood vessel; and

during diastole, restricting a flow of blood from the coronary vessel to the heart chamber via the natural valve.

Claim 36 (previously presented): The method of claim 35, wherein providing the natural valve includes providing the natural valve inside the conduit.

Claim 37 (previously presented): The method of claim 35, wherein providing the natural valve includes providing a section of blood vessel containing at least one naturally occurring valve.

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Claim 38 (previously presented): The method of claim 37, wherein the section of blood vessel is a human vein.

Claim 39 (previously presented): The method of claim 37, wherein the section of blood vessel is an autograft.

Claim 40 (previously presented): The method of claim 37, wherein the section of blood vessel is an allograft.

Claim 41 (currently amended): The method of claim 37, wherein the section of blood vessel is a ~~zenograft~~ xenograft.

Claim 42 (previously presented): The method of claim 35, wherein the heart chamber is a left ventricle.

Claim 43 (previously presented): The method of claim 35, wherein the coronary vessel is a coronary artery.

Claim 44 (previously presented): A bypass system for implantation in a body of a patient, the system comprising:

a tube having a first end and a second end and being configured to be implanted in a heart wall such that the first end is open towards a heart chamber and the second

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end is open towards a coronary vessel, the tube being further configured to permit blood to flow therethrough from the heart chamber to the coronary vessel; and

a natural valve configured to restrict blood flow from the coronary vessel to the heart chamber during diastole.

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Claim 45 (previously presented): The system of claim 44, wherein the natural valve is disposed inside the tube.

Claim 46 (previously presented): The system of claim 44, wherein the natural valve includes a section of blood vessel containing at least one naturally occurring valve.

Claim 47 (previously presented): The system of claim 46, wherein the section of blood vessel lines an interior of the tube.

Claim 48 (previously presented): The system of claim 46, wherein the section of blood vessel is a human vein.

Claim 49 (previously presented): The system of claim 46, wherein the section of blood vessel is an autograft.

Claim 50 (previously presented): The system of claim 46, wherein the section of blood vessel is an allograft.

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Claim 51 (currently amended): The system of claim 46, wherein the section of blood vessel is a ~~zenograft~~ xenograft.

Claim 52 (previously presented): The system of claim 44, wherein the heart chamber is a left ventricle.

Claim 53 (previously presented): The system of claim 44, wherein the coronary vessel is a coronary artery.

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